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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/493,188	01/28/2000	Hidehiro Ishii	P7156-9071	1906
4372 7	7590 05/31/2005		EXAMINER	
ARENT FOX PLLC			PATEL, GAUTAM	
1050 CONNEC	CTICUT AVENUE, N.W.		ART UNIT PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/493,188	ISHII ET AL.				
Office Action Summary	Examiner	Art Unit				
	Gautam R. Patel	2655				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 14 A	pril 2005.					
	s action is non-final.					
3) Since this application is in condition for allowa	-					
Disposition of Claims	·					
4) ☐ Claim(s) 7-71 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 7-71 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E	cepted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority documen application from the International Burea * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicat prity documents have been receive tu (PCT Rule 17.2(a)).	ion No ed in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:					

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DETAILED ACTION

1. Claims 7-71 are pending for the examination.

RCE STATUS

2. The request filed on 4-14-05 for Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 7-46 and 62-66 are rejected under 35 U.S.C. § 102(e) as being anticipated by Heo, US. patent 6,167,192 (hereafter Heo).

As to claim 7, Heo discloses the invention as claimed [see Figs. 2-20 especially 2-8 and 14] including a video data recording area, a video manager recording area and control information indicating audio data intermingled from different recording modes, comprising:

a video data recording area [fig. 2, VOBs] on which an audio stream containing audio data is recorded [col. 4, line 36 to col. 5, line 41]; and

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a video manager recording area [fig. 2, VMGI] located in a different position from the video data recording area in a direction of a diameter of the recording medium, in which control information is recorded.

wherein the control information includes application information indicating whether or not the audio stream recorded in the video data recording area contains audio data intermingled from different recording modes as one stream [col. 4, line 36 to col. 5, line 41].

4. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Heo:

the recording modes include monaural audio [mono], multi-channel [multichannel] audio and multiplexed [stereo] audio [col. 6, line 31 to col. 7, line 12]. NOTE: Stereo is a type of multiplexed audio.

5. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Heo:

the audio stream contains multiplexed audio data [col. 6, line 31 to col. 7, line 12].

6. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Heo:

the multiplexed audio data consists of a plurality of audio channels and contains multiple language data in different audio channels [col. 5, Table 2; col. 9, lines 27-30 and col. 25, lines 1-63].

NOTE: sub-picture stream contains the language information I different audio channels.

7. The aforementioned claim 11, recites the following elements, inter alia, disclosed in Heo:

the audio stream further contains multi-channel audio data, and

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wherein the application information indicates that the audio stream contains the audio data with different recording modes [col. 5, lines 19-43; Table 1].

8. The aforementioned claim 12, recites the following elements, inter alia, disclosed in Heo:

the control information further includes number information indicating a number of audio channels in the audio stream [col. 5, line 6 to col. 6, line 10; Fig. 4 & 5; VTS_AST_Ns & VTS_AST_ATR].

9. The aforementioned claim 13, recites the following elements, inter alia, disclosed in Heo:

the control information further includes number information specifying one of the recording modes [col. 5, line 6 to col. 6, line 10; Fig. 4 & 5; VTS_AST_Ns & VTS_AST_ATR].

10. The aforementioned claim 14, recites the following elements, inter alia, disclosed in Heo:

the control information further includes rate information [sampling frequency] indicating a bit rate of the audio data [col. 9, lines 56-62; col. 10, lines 67; TABLE 21].

11. The aforementioned claim 15, recites the following elements, inter alia, disclosed in Heo:

a recording device [fig.14, unit 104] which records audio data in a video recording area of the recording medium as an audio stream; and

a generating device [fig.14, unit 102] which generates control information in video manager recording area located in a different position from the video data recording area in direction of a diameter of the recording medium,

wherein the recording device records the control information in a video manager recording area located in different position from the video data recording area in a

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direction of a diameter of the recording medium [col. 4, line 36 to col. 5, line 41 & col. 15, lines 23-50].

- 12. As to claims 16-22, they are claims corresponding to claims 8-14 respectively and they are therefore rejected for the same reasons set forth in the rejection of claims 8-14 respectively, <u>supra</u>.
- 13. The aforementioned claim 23, recites the following elements, inter alia, disclosed in Heo:

a reading device [fig. 14, unit 104] which reads the control information from the second recording area of recording medium; and

a controller [fig. 14, unit 104] which controls the reproduction of the audio data recorded on the first recording area of the medium based on the control information [col. 4, line 36 to col. 5, line 41 & col. 15, lines 23-50].

14. The aforementioned claim 24, recites the following elements, inter alia, disclosed in Heo:

the recording modes include monaural audio [mono], multi-channel [multichannel] audio and multiplexed [stereo] audio [col. 6, line 31 to col. 7, line 12]. NOTE: Stereo is a type of multiplexed audio.

15. The aforementioned claim 25, recites the following elements, inter alia, disclosed in Heo:

the audio stream contains multiplexed audio data [col. 6, line 31 to col. 7, line 12].

16. The aforementioned claim 26, recites the following elements, inter alia, disclosed in Heo

the multiplexed audio data consists of a plurality of audio channels and contains multiple language data in different audio channels [col. 6, line 31 to col. 7, line 12].

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the system further comprising operating device [fig. 14, unit 110] for selecting one of the multiple language data, wherein the controller controls the reproduction of the audio data such that only the selected [audio selection switch] one of the multiple language data is reproduced [col. 15, line 23 to col. 16, line 17].

- 17. As to claims 27-30, they are claims corresponding to claims 11-14 respectively and they are therefore rejected for the same reasons set forth in the rejection of claims 11-14 respectively, <u>supra</u>.
- 18. As to claims 31-38, they are method claims corresponding to claims 7-14 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 7-14 respectively, supra.
- 19. As to claims 39-46, they are method claims corresponding to claims 23-30 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 23-30 respectively, supra.
- 20. The aforementioned claims 62-66, recites the following elements, inter alia, disclosed in Heo

the video manger recording area is located inward of the video data recording area [fig. 2-3 and col. 4, line 36 to col. 5, line 41].

Claim Rejections - 35 U.S.C. § 103

- The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

22. Claims 47-61 and 67-71 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Heo as applied claims 1-46 above and further in view of Oguro, US. patent 6,097,558 (hereafter Oguro).

As to claim 47, Heo discloses all of the above elements and steps including a video data recording area, a video manager recording area in different position from each other.

Heo does not specifically disclose well know details such as, how he is separating the data and if he has a mix mode flag to do this.

However, it is well known in the art the use of mixed mode signals and devices [such as mixer chips] and different methods for mixing and separating these audio modes so they can be used in useful manner.

Also Oguro clearly discloses:

a bit [flag] indicating a mix mode [col. 7, lines 29-37 and fig. 8A].

Both Heo and Oguro are interested in improving the storage of the audio signal, both shows different audio modes and both shows different channels for recording and bits indicating different channels.

Therefore, it would have been obvious to provide the system of Heo with data arrangement of a header and associated details such as mix mode flag [MIX] as taught by Oguro. The application or use of the mixed mode flag as taught by Oguro would have been obvious, because the mixed mode flag [or MIX bit] performs the same function in the same way as the decoder [or audio mode processing circuit details] of Heo's system, and is an equivalent element. One of ordinary skill in the art would have

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recognized that the MIX bit of Oguro was equivalent and an obvious alternative to the means for decoding [fig. 14, units 108 and 110].

- 23. As to claims 48-49, they are claims corresponding to claims 12 and 8 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 12 and 8 respectively, <u>supra</u>.
- 24. As to claims 50-52, they are claims corresponding to claims 47-49 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 48-49 respectively, supra.
- 25. As to claims 53-55, they are claims corresponding to claims 47-49 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 48-49 respectively, <u>supra</u>.
- 26. As to claims 56-58, they are claims corresponding to claims 47-49 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 48-49 respectively, <u>supra</u>.
- 27. As to claims 59-61, they are claims corresponding to claims 47-49 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 48-49 respectively, supra.
- 28. The aforementioned claims 67-71, recites the following elements, inter alia, disclosed in Heo:

the video manger recording area is located inward of the video data recording area [fig. 2-3 and col. 4, line 36 to col. 5, line 41].

29. Applicant's arguments with respect to claims 7-71 have been considered but are most in view of the new grounds of rejection.

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Other prior art cited

- 30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Kikuchi et al. (US. Patent 6,553,180) "Digital information recording".
 - b. Jeong (US. patent 6,130,988) "Digital video"

Contact Information

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Wayne Young can be reached on (571) 272-7582.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

Gautam R. Patel Primary Examiner Group Art Unit 2655

GAUTAM R. PATEL PRIMARY EXAMINER

Cut Roll

May 26, 2005